

## Homework 4.1 Question

Suppose you have a collection with the following indexes:

```
> db.products.getIndexes()
[
  {
    "v" : 1,
    "key" : {
      "_id" : 1
    },
    "ns" : "store.products",
    "name" : "_id_"
  },
  {
    "v" : 1,
    "key" : {
      "sku" : 1
    },
    "unique" : true,
    "ns" : "store.products",
    "name" : "sku_1"
  },
  {
    "v" : 1,
    "key" : {
      "price" : -1
    },
    "ns" : "store.products",
    "name" : "price_-1"
  },
  {
    "v" : 1,
```

```

    "key" : {
      "description" : 1
    },
    "ns" : "store.products",
    "name" : "description_1"
  },
  {
    "v" : 1,
    "key" : {
      "category" : 1,
      "brand" : 1
    },
    "ns" : "store.products",
    "name" : "category_1_brand_1"
  },
  {
    "v" : 1,
    "key" : {
      "reviews.author" : 1
    },
    "ns" : "store.products",
    "name" : "reviews.author_1"
  }
]

```

Which of the following queries can utilize at least one index to find all matching documents, or to sort? Check all that apply.

Note: the text for some answers may wrap; you can ignore the wrapping.

Check all that apply:

- a. `db.products.find( { 'brand' : "GE" } )`
- b. `db.products.find( { 'brand' : "GE" } ).sort( { price : 1 } )`
- c. `db.products.find( { $and : [ { price : { $gt : 30 } }, { price : { $lt : 50 } } ] } ).sort( { brand : 1 } )`
- d. `db.products.find( { brand : 'GE' } ).sort( { category : 1, brand : -1 } )`